## IN THE UNITED STATES PATENT & TRADEMARK OFFICE

In re Application of:
Smith, Dwight M.

Serial No.: 10/768,613

Serial No.: 10/768,613

Serial No.: January 30, 2004

Filed: January 30, 2004

Title: Method and Composition for Creation of Conversion Surface

Serial No.: 27435.002

## DECLARATION OF MARK LAY REGARDING INOPERABILITY OF CITED REFERENCE IN SUPPORT OF RESPONSE TO OFFICE ACTION

I, Mark Lay, state the following, of which I have personal knowledge:

- 1. I am the President of EnviroFuels, LLC ("EnviroFuels") and I have a mailing address of 2328 Bellfort Street, Houston, TX 77051. I have held this position since at least 1999.
- 2. I am a not a named inventor of the subject application.
- 3. I have reviewed the disclosure of WO 98/08919 ("Kalota") and authorized the creation of the preferred composition as described in Kalota. The preferred composition tested contained an alkali metal orthophosphate, K<sub>2</sub>HPO<sub>4</sub>, a polycarboxylic acid/carboxylate, adipic acid, and an amide, acrylamide. The concentrations were adjusted to fall in the mid-range claimed by Kalota et al. (10% w/w adipic acid, 10% w/w acrylamide, K<sub>2</sub>HPO<sub>4</sub> to provide 3000 ppm P, in 480 mL water solution). The pH was adjusted to neutrality with KOH.
- 4. The composition of Kalota was tested pursuant to my authorization on a 1018 steel cylinder that was furnished by Advanced Machining, Inc., of Longmont, Colorado. The steel cylinder was covered with the solution by immersion at 180 °F for a 24 hour period. Following a rinse with pure acetone, the treated cylinder, along with an untreated steel cylinder (as a control) was analyzed with surface analytical instrumentation at Rocky Mountain Laboratories, Golden, Colorado.
- 5. It is my understanding based on results achieved by Rocky Mountain Laboratories that the treated surface of each cylinder was analyzed by optical microscopy and scanning electron

microscopy (SEM) fitted with energy dispersive Xray spectroscopy (EDS). The results indicate that the preferred solution of Kalota is incapable of forming a conversion surface on steel. The spectra and analytical data are attached.

I hereby declare under penalty of perjury that the foregoing is true and correct.

Dated:

5/17/08

Mark Lay

President, EnviroFuels, LLC